

### K042842

CAINESCREEN SEE

1905 - 77 1541 TAX 352 376 0617

# Exactech® Novation 12/14 Press-Fit Femoral Stems

NOV - 9 2004

510(k) Summary of Safety and Effectiveness Special 510(k)

Sponsor: Exactech® Inc.

2320 N.W. 66<sup>th</sup> Court

Gainesville, Florida 32653

Phone:

(352) - 377 - 1140

Fax:

(352) - 378 - 2617

FDA Establishment Number 1038671

Contact:

Gary J. Miller

Exec. V.P. of Research & Development

Date:

October 7, 2004

K042842

## Exactech® Novation 12/14 Press-Fit Femoral Stems

### 510(k) Summary of Safety and Effectiveness Special 510(k)

### Trade or proprietary or model name(s):

Novation 12/14 Press-Fit Plasma Femoral Stems

### Information on devices to which substantial equivalence is claimed:

510(k)	Trade or Proprietary or Model Name	Manufacturer
Number		
#K041906	AcuMatch P-Series Plasma Press-Fit Femoral Stems	Exactech, Inc.

#### INDICATIONS FOR USE:

All Exactech Hip Systems are indicated for use in skeletally mature individuals undergoing primary surgery for hip replacement due to osteoarthritis, rheumatoid arthritis, osteonecrosis, post-traumatic degenerative problems of the hip, and for treatment of proximal femoral fractures where prosthetic replacement is determined by the surgeon as the preferred treatment. Components of Exactech Hip Systems are also potentially indicated for ankylosing spondylitis, congenital hip dysplasia, revision of failed previous reconstructions where sufficient bone stock is present, and to restore mobility resulting from previous fusion.

Novation® press-fit femoral stems are intended for press-fit fixation.

Press-fit femoral stems without hydroxyapatite (HA) coating may also be used with bone cement at the discretion of the surgeon.

### **Device Description:**

The proposed Exactech Novation 12/14 Press-Fit Femoral Components are a modification of the AcuMatch P-Series Plasma Press-Fit Femoral Stems cleared through premarket notifications #K041906.

The predicate and proposed products have the same intended use and the same basic fundamental scientific technology.

## Exactech<sup>®</sup> Novation 12/14 Press-Fit Femoral Stems

### 510(k) Summary of Safety and Effectiveness Special 510(k)

The modified Novation femoral stems share the following similarities to the predicate AcuMatch femoral stems:

- the same indications for use,
- similar design features (e.g. neck angle, femoral head taper design (12/14), neck flat geometry (angled), offsets standard and extended).
- the same materials (titanium alloy, commercially pure titanium plasma spray and hydroxyapatite coating)
- the same shelf life (5 years), and
- are packaged and sterilized using the same materials and processes (gamma radiation sterilization to a sterility assurance level (SAL) of 10<sup>-6</sup>).

This Special 510(k) application supports the following design changes:

- The trapezoidal cross-sectional area was modified to a circulo-trapezoidal geometry.
- A change to the sizing range and differential.
- A distally "splined" model was added to the product line.
- Change in plasma coating application area.

### Substantial Equivalency Conclusion:

A risk analysis was performed to assess the impact of the modifications on the safety of the Novation femoral stem design. Based on successful completion of design control activities for the Exactech Novation 12/14 Press-Fit Plasma Femoral Stems, we propose that they are substantially equivalent to the Exactech AcuMatch 12/14 P-Series Plasma Press-Fit Femoral Stems cleared through premarket notification #K041906. Supporting verification activities include ISO 7206-8 empirical fatigue testing and engineering analyses.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

NOV - 9 2004

Gary J. Miller, Ph.D.
Executive Vice President of Research & Development
Exactech, Inc.
2320 N.W. 66<sup>th</sup> Court
Gainesville, Florida 32653

Re: K042842

Trade/Device Name: Novation 12/14 Press-Fit Femoral Stems

Regulation Number: 21 CFR 888.3353, 888.3350

Regulation Name: Hip joint metal/ceramic/polymer semi-constrained cemented or

non-porous uncemented prosthesis, Hip joint metal/polymer semi-

constrained cemented prosthesis

Regulatory Class: II

Product Code: LZO, MEH, LWJ, JDI

Dated: October 8, 2004 Received: October 14, 2004

#### Dear Dr. Miller:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/dsma/dsmamain.html">http://www.fda.gov/cdrh/dsma/dsmamain.html</a>

Sincerely yours,

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative and Neurological Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

352 377 1140 FAX 352-378-2617

### Exactech®, Inc.

### Indications for Use

510(k) Number (if known):

K042842

**Device Name:** 

Novation 12/14 Press-Fit Femoral Stems

### INDICATIONS FOR USE:

All Exactech Hip Systems are indicated for use in skeletally mature individuals undergoing primary surgery for hip replacement due to osteoarthritis, rheumatoid arthritis, osteonecrosis, post-traumatic degenerative problems of the hip, and for treatment of proximal femoral fractures where prosthetic replacement is determined by the surgeon as the preferred treatment. Components of Exactech Hip Systems are also potentially indicated for ankylosing spondylitis, congenital hip dysplasia, revision of failed previous reconstructions where sufficient bone stock is present, and to restore mobility resulting from previous fusion.

Novation® press-fit femoral stems are intended for press-fit fixation.

Press-fit femoral stems without hydroxyapatite (HA) coating may also be used with bone cement at the discretion of the surgeon.

Prescription Use X and/or Over-The-Counter Use (Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

Please do fou writebelow this line - use another page if needed.

Concdreence of CDRH, Office of Device Examples (ODE)

(Division Sign-Off)

Division of General, Restorative, and Neurological Devices

Rev. 10/04/04

510(k) Number K043843

Section 3
Page 1 of 1